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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,314	02/12/2002	Takeo Kanade	010129	6431
26285	7590	06/10/2005	EXAMINER	
KIRKPATRICK & LOCKHART NICHOLSON GRAHAM LLP			SENGI, BEHROOZ M	
535 SMITHFIELD STREET			ART UNIT	
PITTSBURGH, PA 15222			PAPER NUMBER	

2613

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/074,314

Applicant(s)

KANADE ET AL.

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/28/05, fwd 4/5/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33,40-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 and 40-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/16/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments filed (2/28/2005, fwd 4/5/2005) have been fully considered but they are not persuasive.

Applicant's amendment canceled claims 34 – 39 and added new claims 42 – 45.

Response to Remarks:

Applicant asserts (page 14, lines 2 from the bottom of the page through page 15, lines 11 and lines 23 - 25) that there is no teaching in the Paff reference "to keep the size of the target in the images substantially the same, in Paff There is no mention of determining the zoom and focus parameters of the slave cameras such that the size of the target is substantially the same in the images from the different cameras and as an additional embodiment, Paff does teach that the master camera can broadcast information relating to the zoom status and focus of the master camera and calculating the focus and zoom parameter of the slave cameras that leads to having the target be substantially the same size in the images".

Examiner respectfully disagrees: Paff '827 indicates that, master camera provides and broadcast information related to respective pan, tilt, focus and zoom to slave cameras so that the slave cameras automatically move to adjust based upon the same received information from the master camera to view the same object/target (i.e. col. 4, lines 6 – 16), by using the same parameters pan, tilt, focus and zoom the size of the images would be substantially the same and covers the limitations as claimed.

Applicant asserts (page 16, lines 4 – 7) that Paff lacks several other elements recited in the claims as example “Paff fails to teach or suggest a video sequence generator that generates a video image sequence of the target by outputting an image from certain of the cameras”.

Examiner response: Applicant fails to raise a point of argument of, why the reference fails to teach the above subject matter. Furthermore, Paff discloses video surveillance system using video cameras located throughout premises. Video camera is capable of providing/generating video sequence, such as field or frame sequence (for example see, fig. 1 of Jain '126, 11a-11n, video camera sequence buffers), and also slave cameras in Paff, has the same functionality as the master variable pointing camera and being controlled by the master camera and uses received information from the master variable pointing video camera to automatically move to adjust based upon the same received information from the master variable pointing video camera system according to the position of master variable pointing video camera to view the same object/target and provide video image sequence.

Applicant asserts (page 16, lines 16) that claims 31 – 33 are not rejected.

In response: claims 32 was rejected under 35 U.S.C. 102(b) as being anticipated by Paff, and claims 31 and 33 were rejected under 35 U.S.C. 103(a) over Paff in view of Hobson (please see previous office action, dated 11/30/04).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 22, 26 – 30, 32 and 40 - 41, are rejected under 35 U.S.C. 102(b) as being anticipated by Paff (US 5,164,827) for the same reason as set forth in the last Office Action (dated 11/30/2004). The grounds are being restated with indication of the amended claims 31 – 33.

Regarding claims 1, 10, 19, 28 and 40, Paff '827 discloses "a system for servoing/tracking a moving target within a dynamic scene" (i.e. fig. 5, col. 1, lines 5 – 10) comprising; "a master variable pointing camera system" (i.e. fig. 6, master camera), and "a plurality of slave variable pointing camera system" (i.e. fig. 6, slave cameras), and "a master control unit in communication with the master variable pointing camera system for determining based on parameter of the master variable pointing camera system, parameters for each of the slave variable pointing camera system such that, at a point in time, the master variable pointing camera system and the slave variable pointing camera system are aimed at the target and a size of the target in an image from each of the master variable pointing camera system and the slave variable pointing camera system is substantially the same" (i.e. fig. 6, master controller 10, which communicate with the master camera and the slave cameras, and each camera includes, pan motor, tilt, focus and zoom, and the master and slave cameras are interdependent, it is clear that when master camera and slave camera are aimed at a target the size of the object is substantially the same), and "a plurality of slave camera

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control unit in communication with the master control unit” (i.e. each slave camera has the same component configuration as the master camera in fig. 6).

Regarding claims 2, 11 and 29, the claimed “master and slave pointing camera system include pointing parameters and optical parameters” reads on (i.e. fig. 6, pan, tilt, zoom and focus).

Regarding claims 3 - 4, 12 – 13 and 30, the claimed “master camera includes a master pan/tilt,” reads on (i.e. fig. 6, pan/tilt of master camera, and the slave cameras have the same component configuration as the master camera).

Regarding claims 5 – 6, 14 – 15, the limitations as claimed “video image sequence generator in communication with master control unit and the slave camera control unit for generating a video image sequence of the target by outputting an image from” is inherent in master/slave camera surveillance system for monitoring/tracking the object within the scene.

Regarding claims 7, 16, 26, the limitation as claimed “computer vision control unit in communication with the master control unit and the master pointing camera” reads on (i.e. microprocessor or dedicated hardware, col. 3, lines 24 – 27).

Regarding claims 8, 17 and 27, the limitation as claimed “remote operator interface unit in communication with the master control unit” reads on (i.e. fig. 6, monitoring station 11).

Regarding claims 9, 18, 20 and 32, the limitation as claimed “determining a position of the target within the scene and a size of the target at the position in an image” reads on (i.e. fig. 6, pan and tilt features of the master camera, for position and

zoom and focus features of the master camera for size of the subject within the scene).

As for the newly amended claim 32, by replacing the word “master” variable pointing camera with “first” variable pointing camera and “slave” variable pointing camera with “other” variable pointing camera, does not change the scope of the claim. Therefore claim 32 is still rejected for the same reason as cited above.

Regarding claims 21 – 22 and 41, the limitations as claimed “servo control” reads on (fig. 6, 13 – 16 and controller 10), and as for “plurality of master control units in claim 41”, Paff ‘827 (i.e. fig. 6) discloses plurality of controller for communication with each other.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 23 – 25, 31 and 33, are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff ‘827 in view of Hobson et al (US 2001/0052131).

Regarding claims 23 and 31, Paff ‘827 teaches “a system for servoing/tracking a Moving target/object and a master variable pointing camera system and plurality of slave variable pointing camera system and a master control unit in communication with the master variable pointing camera system” as discussed above in claim 1. Paff ‘827 fails to explicitly teach, “time-stamped images are being stored”. However such features are well known and used in the prior art of the record as evidenced by Hobson

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'131 (i.e. page 2, section 0017). Therefore, taking the combined teaching of Paff '827 and Hobson '131, it would have been obvious to one skilled in the art at the time of the invention was made to use the teaching of Hobson by storing/recording images with date and time stamp for easy and random access search and recall (i.e. page 2, section 0017).

Regarding claims 24 - 25, combination of Paff '827 and Hobson '131 teach, "video image sequence includes a frame-sequencing" (i.e. fig. 3, frame grabber 16 of Hobson), and "review images claim 25" reads on (i.e. page 2, section 0016).

Regarding claim 33, combination of Paff '827 and Hobson '131 teach, "selection of pointing camera" (i.e. col. 1, lines 22 – 23 of Paff).

6. Claims 42 – 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff '827 in view of Jain (US 5,745,126).

Regarding claims 42, the primary reference Paff teaches, "video surveillance system using video cameras located throughout premises, and slave cameras are being controlled by the master camera and outputting images from each of the master variable pointing camera system and the slave variable pointing camera systems according to their position around the scene" as discussed above. Paff does not particularly show "using images from the same scene/target from plurality of cameras looking at the same scene to view 3D (3D stop-motion) video image". However the concept of using plurality of camera looking at the same scene at different angle to produce/view the a 3D video image is well known and used in the prior art of the record, as evidenced by Jain '126 (i.e. figs. 2, 4 – 8, col. 8, lines 50 – 60). Taking the combined

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teaching of Paff '827 and Jain '126 as a whole, It would have been obvious to one skilled in the art at the time of the invention was made to enhance the camera system of Paff '827 to combine the images taking from the cameras to produce/generate three dimensional video image from the same scene, as suggested by Jain '126 (i.e. col. 8, lines 50 – 60).

Regarding claims 43 – 45 the limitations claimed are substantially similar to claim 42, therefore the grounds for rejecting claim 42 also applies here.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone

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number is **(571)272-7339**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Dastouri Mehrdad** can be reached on **(571)272-7418**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, D.C. 20231

Or faxed to:


(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. M. S. 

6/2/2005


VU LE
PRIMARY EXAMINER